



STATE OF MARYLAND

DMMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street, Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – John M. Colmers, Secretary

Office of Preparedness & Response

Sherry Adams, R.N., C.P.M., Director

Isaac P. Ajit, M.D., M.P.H., Deputy Director

November 12, 2010

Public Health & Emergency Preparedness Bulletin: # 2010:44 Reporting for the week ending 11/6/10 (MMWR Week #44)

CURRENT HOMELAND SECURITY THREAT LEVELS

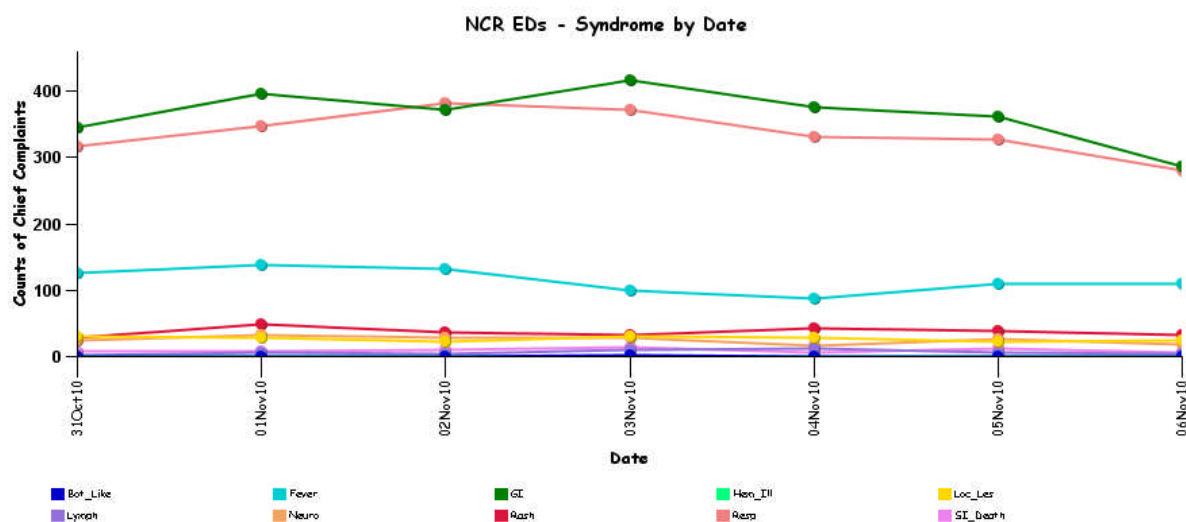
National: Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)
Maryland: Yellow (ELEVATED)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

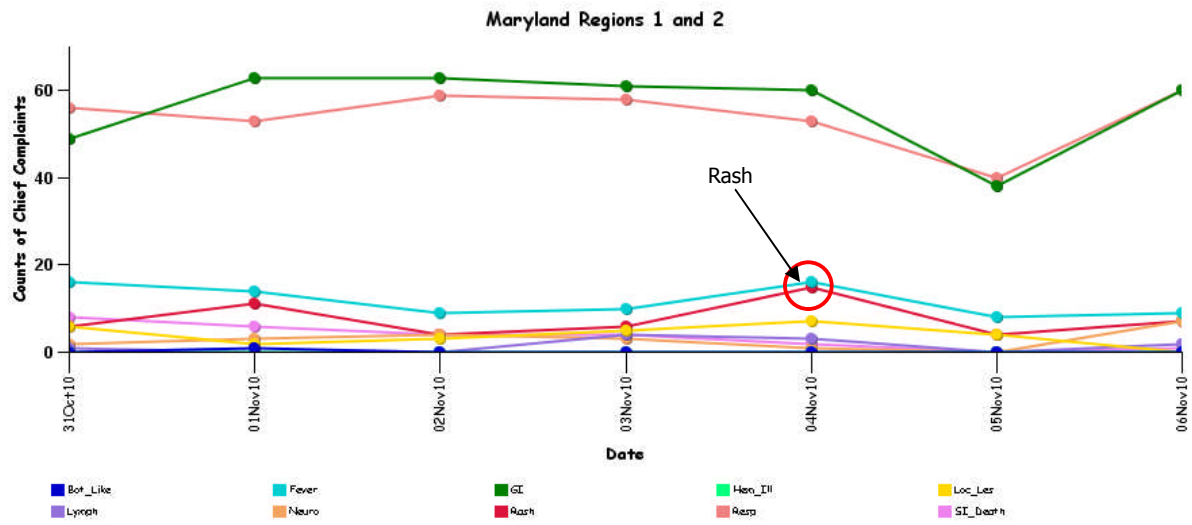
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

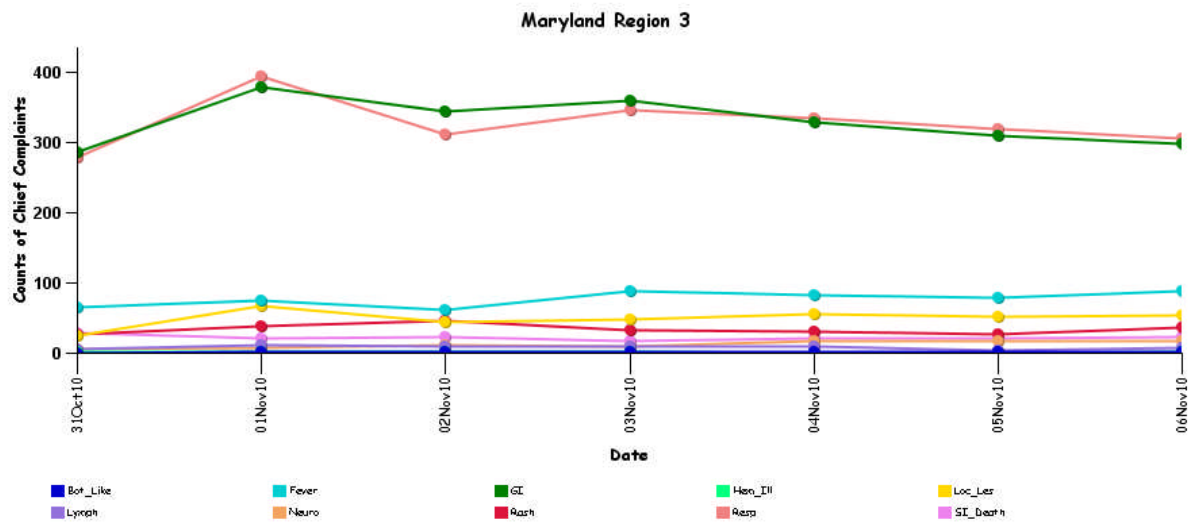


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

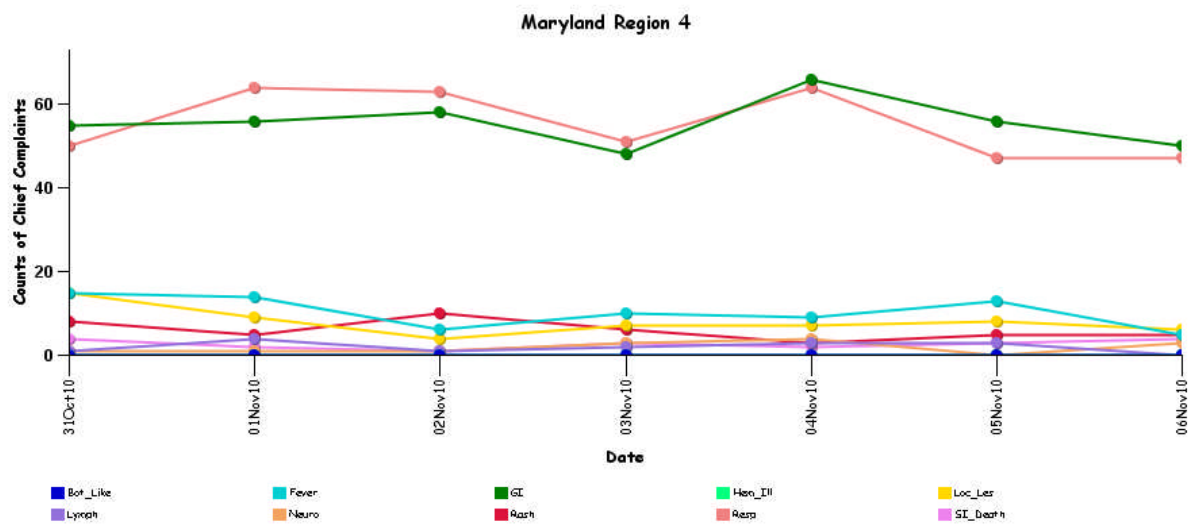
MARYLAND ESSENCE:



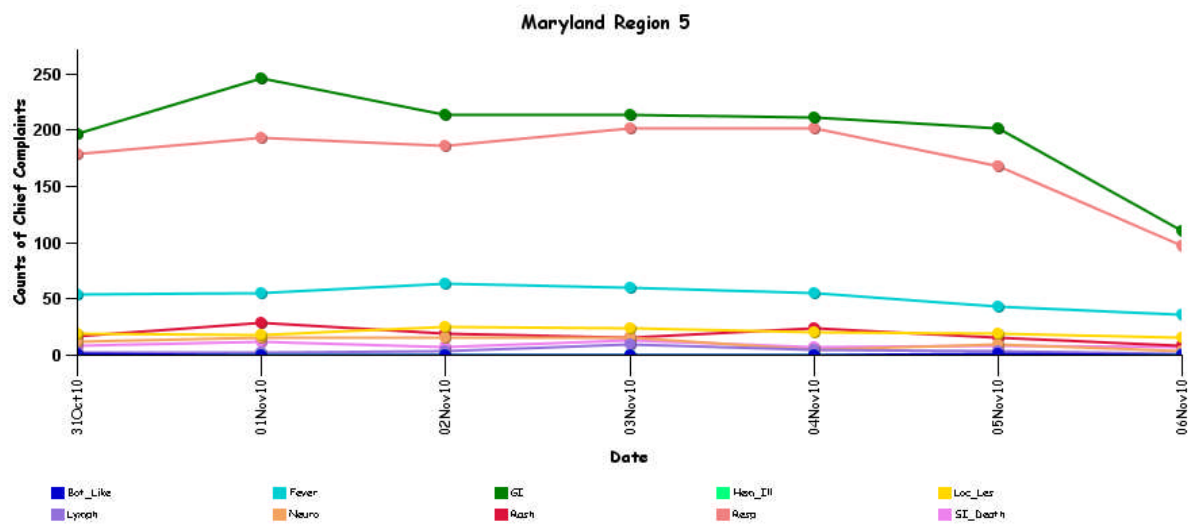
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE

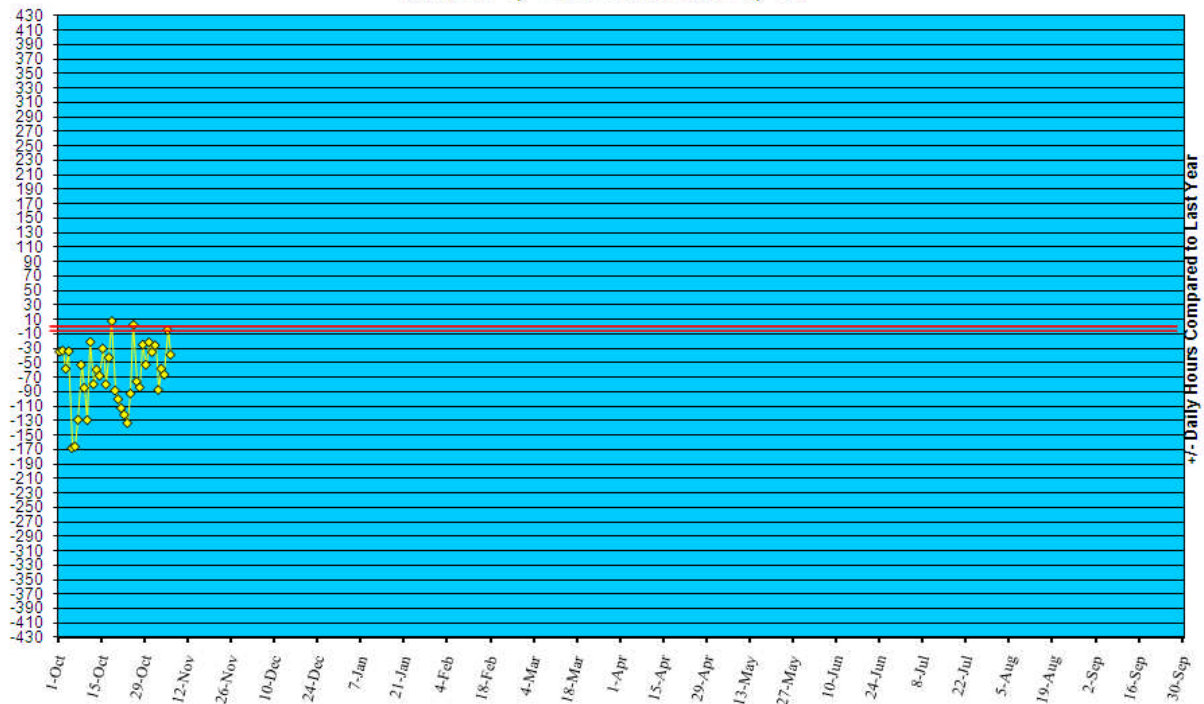


* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/10.

Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '10 to November 6, '10



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in October 2010 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	<u>Aseptic</u>	<u>Meningococcal</u>
New cases (October 31 – November 6):	10	0
Prior week (October 24 – October 30):	15	0
Week#44, 2009 (November 1 – November 7, 2009):	8	0

2 outbreaks were reported to DHMH during MMWR Week 44 (October 31 – November 6, 2010):

1 Gastroenteritis outbreak:

1 outbreak of GASTROENTERITIS in an Adult Daycare

1 Foodborne gastroenteritis outbreak:

1 outbreak of E. coli O157:H7 associated with a farm product

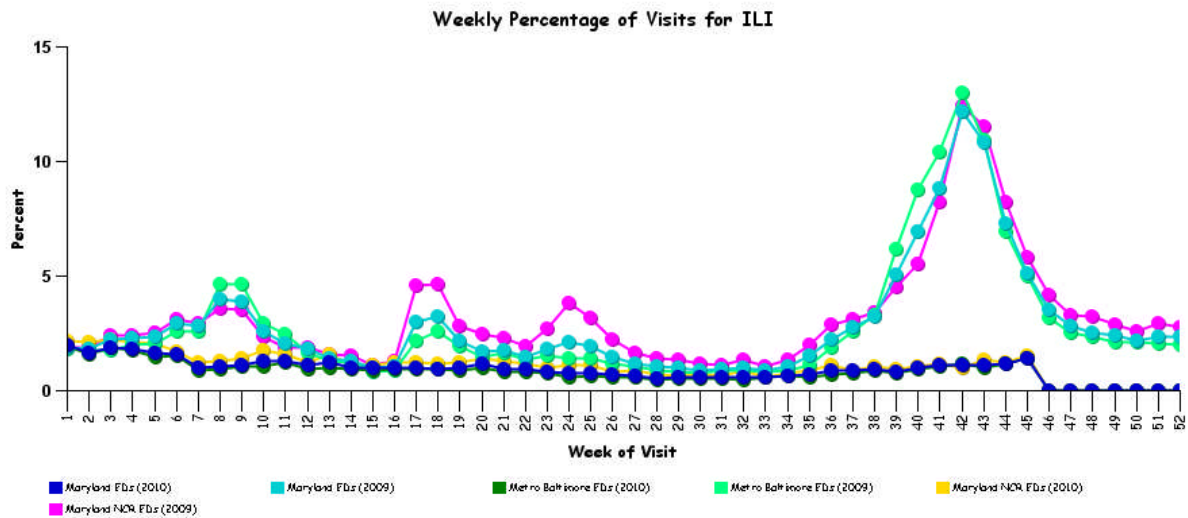
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity was sporadic for Week 44.

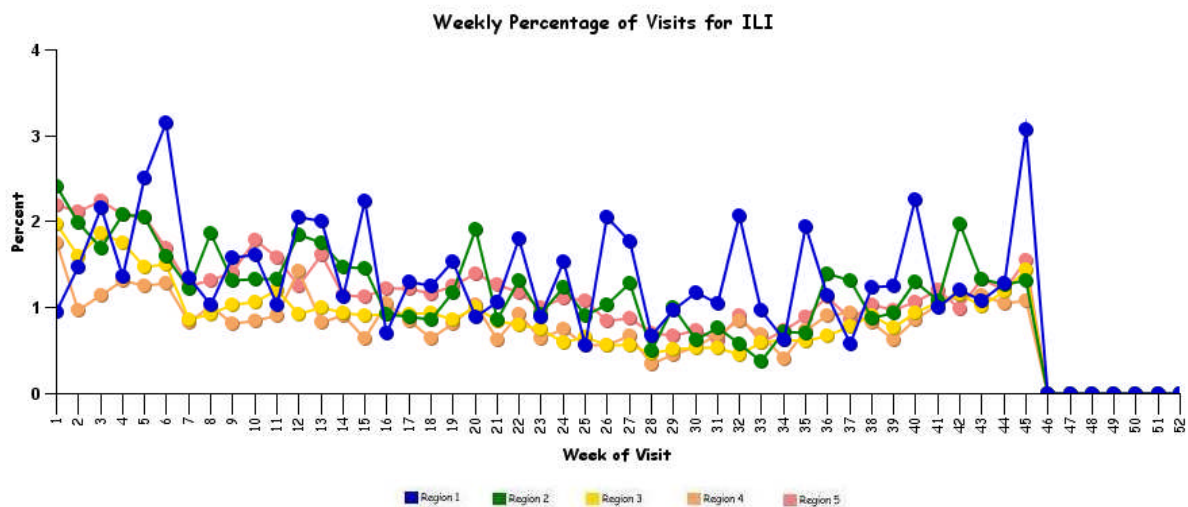
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



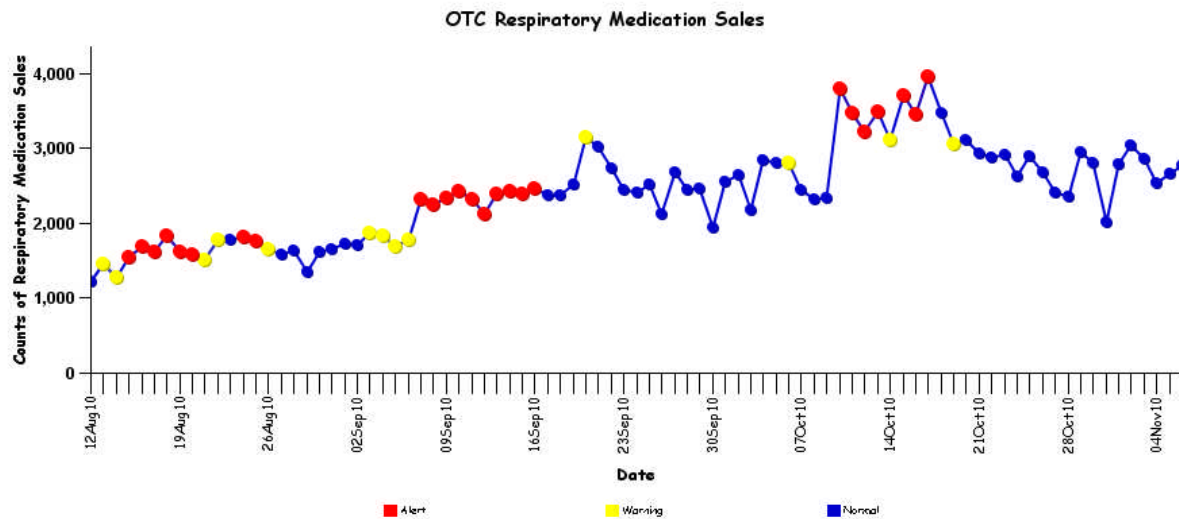
* Includes 2009 and 2010 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2010 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of October 18, 2010, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 507, of which 302 have been fatal. Thus, the case fatality rate for human H5N1 is about 60%.

NATIONAL DISEASE REPORTS

E. COLI O157 (USA): 05 Nov 2010, Bravo Farms Dutch Style Gouda cheese, (Costco item 40654) offered for sale and in cheese sampling events at Costco Wholesale Corporation (Costco) locations is preliminarily linked with an outbreak of E. coli O157:H7 infections. The cheese was available for sale, and free samples were offered for in-store tasting at Costco stores in Arizona, California, Colorado, New Mexico, and Nevada. Consumers who have any of this cheese should not eat it. They should return the cheese to the place of purchase or dispose of it in a closed plastic bag and place in a sealed trash can to prevent people or animals, including wild animals, from eating it. As of Thu 4 Nov 2010, 25 persons infected with the outbreak strain of E. coli O157:H7 have been reported from 5 states since mid-October. The number of ill persons identified in each state with this strain is as follows: AZ (11), CA (1), CO (8), NM (3), and NV (2). There have been 9 reported hospitalizations, 1 possible case of hemolytic uremic syndrome (HUS), and no deaths. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

LISTERIOSIS, FATAL (TEXAS): 05 Nov 2010, After conducting their own investigation into a deadly outbreak of listeriosis, federal health officials confirmed Wednesday [3 Oct 2010] that the source was a San Antonio produce company temporarily shut down by the state. Sangar Produce & Processing Co. had disputed earlier test results from the Texas Department of State Health Services that found Listeria on cut celery, arguing that independent tests by a private lab on the same batches failed to find any contamination. But the Food and Drug Administration (FDA) said in a statement it found Listeria bacteria -- not only on celery but also in several places in the building, including work surfaces, after a visit 14 and 15 Oct 2010. The strain of Listeria was genetically matched to people sickened in the outbreak, the FDA statement said. "These results come as no surprise to us," said Carrie Williams, a spokeswoman for the state health department. "This adds to the body of evidence, and it further confirms the

fact there were serious *Listeria* issues inside the plant. If there was any doubt out there, this erases it." The company's lawyer remained skeptical. "The FDA and the state have not turned over to us the documentation supporting their findings," attorney Jason Galvan said in an e-mail. "We cannot comment on these most recent findings until the documentation is provided for independent evaluation by our experts." Still, he added, "We are working closely with the FDA and the state in the hopes of reopening soon." The FDA also released its own inspection report that found a number of sanitary problems at the plant, including improperly refrigerated foods, inadequate hand-washing facilities, and a number of examples where vegetables and equipment might have come in contact with water on the plant's floor. Over several months, 10 people in Bexar, Travis, and Hidalgo counties were infected with the same strain of *Listeria* -- 5 of them fatally. Of the deaths, 3 were from Bexar County and a 4th -- a Guadalupe County resident -- died [in San Antonio]. Laboratory tests by DSHS now have conclusively linked 7 of the 10 infections to the company's celery, one more than when the plant was shut down, Williams said. Citing the possibility of cross-contamination, the state ordered a recall of all products -- not just celery -- shipped from the plant since January [2010]. The recall involved thousands of pounds of produce distributed to more than 300 customers, including restaurants, hospitals, school districts, military facilities, and large wholesalers. Sangar officials unsuccessfully sought to reopen the plant last week [week of 25 Oct 2010]. An administrative hearing has been scheduled for 17 Nov 2010. Williams said it would require "a series of negative test results on food and environmental samples before the company can reopen." *Listeria monocytogenes*, a bacterium commonly found in soil, can easily contaminate meat and vegetables. When eaten, it rarely causes serious illness in healthy people but can be deadly in those with weakened immune systems such as the elderly, the very young, and pregnant women. Of the 10 Texas cases, all were frail and elderly with underlying health problems. Many were hospitalized before or during their infection. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

ST. LOUIS ENCEPHALITIS (TEXAS): 03 Nov 2010, For the 2nd time this year [2010], a Nueces County man is being treated for St. Louis encephalitis [SLE], a disease [virus] transmitted through mosquito bites. The man was hospitalized, but has been released, according to the Nueces County Public Health District. His name and details of his illness were not released. 2 weeks ago [week of 18 Oct 2010], health officials determined a man who originally tested positive for West Nile virus actually had St. Louis encephalitis, officials said. That man has since recovered. Since 1990, 74 people in Texas have tested positive for St. Louis encephalitis, according to the Texas Department of State Health Services. Unlike West Nile virus, St. Louis encephalitis comes in spurts, and most years, there are no cases of the mosquito-borne disease found in humans, according to state records. The last Texas death from the virus was in 1995. Noelia Rodriguez of the county health district said mosquito season is likely over for the year, but people still should take precautions. That means avoiding time outside during peak mosquito hours, from dusk until dawn, and wearing insect repellent. "With the cooler temperatures we should start to be out of the woods," Rodriguez said, noting no mosquitoes could be found during the last collection period Thursday [28 Oct 2010]. (Viral Encephalitis is listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

HANTAVIRUS (COLORADO): 01 Nov 2010, A Montezuma County man who died suddenly 19 Oct [2010] had contracted hantavirus from rodent feces and urine, a Colorado Department of Public Health and Environment veterinarian said Friday [29 Oct 2010]. Laboratory tests confirmed Friday the cause of death, Elisabeth Lawaczek said. She couldn't release personal information, but she said the victim, 35, worked at least part time in construction. The man, a resident of Mancos, had traveled in several places where he could have come in contact with rodent feces, Lawaczek said. State health officials will try to pin down a source next week, she said. The last hantavirus death of a Montezuma County resident killed a woman in 1993, Lawaczek said. She contracted the disease in San Miguel County. La Plata County has registered a number of human hantavirus cases, including 3 deaths, since 1985, Lawaczek said. One of the deaths occurred in 1993, the others in 1998. Hantavirus causes a respiratory infection caused by breathing air contaminated with rodent feces or urine [containing virus], Lawaczek said. A typical case would involve someone who was cleaning a house, cabin or shed that has been closed for a time, Lawaczek said. Sweeping could create dust contaminated with [virus carrying] rodent droppings or urine, she said. "The lungs fill with fluid," Lawaczek said. "The fluid prevents the oxygenation of red blood cells." (Emerging Infectious Disease is listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS

TRICHINELLOSIS (ARGENTINA): 06 November 2010, An outbreak of trichinosis cases was reported in the city of Cordoba. This was confirmed by the Cordoba Ministry of Health, which reported on the situation through its Epidemiology Unit and warned of the dangers of consuming or buying pork of dubious origin or without the corresponding health inspection. So far, 7 cases of this disease have been reported in people from Cordoba city, the Capital of the Department [State] who are being treated in different hospitals of the city. A report released by the Ministry of Health states that "according to investigations, a common link between the cases was established in that they all ate dry salami purchased in various commercial areas in the Barrio Santa Isabela 1st Section, Pueyrredon, Zumaran, and the city center. "The investigation and appropriate control measures are being conducted jointly by professionals from the Epidemiology Unit of the Ministry of Health, and the municipality of Cordoba through the Directorate of Food Quality and reporting to Senasa [National Food Safety and Quality Service] and the Ministry of Agriculture." (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

JAPANESE ENCEPHALITIS AND OTHER (INDIA): 05 November 2010, A health official said that 2 more persons succumbed to encephalitis [in Gorakhpur], taking the death toll to 469 in eastern Uttar Pradesh this year [2010]. The 2 patients succumbed at the Baba Raghav Das Medical College Hospital [BRDMCH; in Gorakhpur], which has admitted 14 fresh cases since 03 Nov 2010, additional director (Health) UK Srivastava said. One of the deceased was from Mahrajganj, while the other was a resident of Deoria. As many as 194 patients are undergoing treatment at the BRDMCH and 22 in other government hospitals in the region, he said. (Viral Encephalitis is listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

ANTHRAX, HUMAN (ENGLAND): 03 Nov 2010, The Health Protection Agency (HPA) can confirm that the patient being treated for anthrax infection in a Kent hospital died this afternoon [3 Nov 2010]. Dr. Mathi Chandrakumar, Director of Kent Health

Protection Unit, said: "This is a sad outcome, but I would like to repeat that there is no risk to the general population, including close family members of the patient. It is extremely unlikely that this form of anthrax can spread from person to person." He added that this was a serious infection which now numbered among risks to drug users. "We continue to see occasional cases among injecting drug users, following a cluster of cases earlier this year [2010]. Exposure to anthrax is now one of a number of risks that drug users are exposed to. All heroin users should seek urgent medical advice if they experience signs of infection such as redness or excessive swelling at or near an injection site, or other symptoms of general illness such as high temperature, chills or a severe headache or breathing difficulties, as early antibiotic treatment can be lifesaving." (Anthrax is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

UNDIAGNOSED PARALYTIC ILLNESS (REPUBLIC OF CONGO): 02 Nov 2010, An epidemic similar to poliomyelitis has been raging in Pointe-Noire, the principal economic and industrial center of the Congo, for nearly 2 weeks. There are already 8 deaths and 20 cases reported, the Congolese Ministry of Health announced on Tuesday [2 Nov 2010]. "Patients have been admitted to hospitals with symptoms of an influenza-like illness. They also have paralysis starting with the legs and [ascending] to the upper extremities," said the Director General [DG] of Health, Professor Alexis Elira Dockekias. "This epidemic is very similar to poliomyelitis which has raged [in the past] with the difference that this time the disease is affecting teenagers and adults, unlike polio, which mainly affects young children," said Professor Elira Dockekias. According to the DG of Health, the disease is probably caused by a virus that invades the digestive tract. The Congolese Ministry of Health has already notified the World Health Organization (WHO), in accordance with the provisions concerning international health epidemics [this probably refers to the International Health Regulations (IHR)]. However, Professor Elira Dockekias urged the public not to panic but to observe basic hygiene measures in consuming only potable water. "Water must be boiled before consumption; one can also use the products recommended by health services to citizens," said the DG of Health. Due to the lack of potable water in some districts of Pointe-Noire, especially in the periphery [outside of the center of town], people can consume water from wells and some poorly maintained boreholes that, during the rainy season, serve as homes for multiplication of many parasites, bacteria and viruses that cause epidemics. (Emerging Infectious Disease is listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

SALMONELLOSIS, SEROTYPE PARATYPHI A (CHINA): 01 Nov 2010, Local authorities said Saturday [30 Oct 2010] that 80 people, including 77 middle school students, are being quarantined amid an outbreak of paratyphoid fever in south China's Guangxi Zhuang Autonomous Region. The patients have been quarantined and are being treated in a local hospital in Luocheng Mulam Autonomous County, Hechi City, where medical experts are working to contain the disease, according to a statement from officials of Guangxi's health department. Paratyphoid fever is caused by drinking or eating contaminated water or food. Though the disease has some similarities to typhoid fever, its symptoms are generally less severe. Cases of paratyphoid type A fever were first reported in late September 2010 and surged in October. 84 students were reported to have contracted the disease. Of them, 7 have since been discharged from the hospital, said Pan Lichang, head of the county's health department. A high school student, said 17 of her classmates contracted the disease, suffering from fever, headache, and diarrhea. Most of the patients are in stable condition, said Wei Dongping, Luocheng's vice county head. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

SALMONELLOSIS, SEROTYPE BAREILLY (ENGLAND): 01 Nov 2010, An outbreak of *Salmonella* [enterica serotype_] Bareilly infection from contaminated bean sprouts in England and Scotland is continuing. The HPA's Centre for Infections (CFI) in Colindale has now identified 190 confirmed *S. Bareilly* cases in England, Wales (5 of the cases), and Northern Ireland (2 cases) since the beginning of August 2010 to date. The CFI normally sees fewer than 10 cases in a typical month. Health Protection Scotland has identified 21 confirmed cases in the same period. Both the HPA and the Food Standards Agency (FSA) stress that bean sprouts are safe to eat provided that they are washed and cooked until piping hot before consumption or are clearly labeled as ready-to-eat. Dr Joe Kearney, a director with the HPA's Local and Regional Services Division, is chairing an outbreak control team comprising representatives from the Agency, the FSA, Health Protection Scotland, and Environmental Health Officers from a number of local authorities. Dr Kearney said: "As the outbreak continues, it is important for caterers and people who buy bean sprouts to eat at home to ensure that these products are properly prepared and cooked until they are piping hot unless they are clearly labeled as "ready-to-eat". Dr Kearney added that people who prepare meals in catering establishments and in the home should keep raw bean sprouts separate from other salad products, including ready-to-eat bean sprouts, to avoid the risk of cross-contamination. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

LEPTOSPIROSIS, FATAL (ENGLAND): 01 Nov 2010, Safety reassurances have been offered to people who enjoy water sports on the River Witham following the death on Sunday [24 Oct 2010] of a [51-year-old] Olympic rowing champion, from a suspected waterborne bacterial infection. He became unwell after rowing 31 miles [50 km] from Lincoln to Boston [UK] on 19 Sep 2010 in the annual Boston Rowing Marathon. It was thought [the rower], who has 5 children, contracted Weil's disease [leptospirosis] after being exposed to water contaminated with urine from infected animals, such as rats and cattle. The athlete recently returned to the water after a 17-year break from the sport and clinched 4th place in the single scull for the 50 to 55 age group class in the Boston Rowing Marathon, which begins at Stamp End in Lincoln. In the days after the race, [the rower] was said to be feeling unwell and had a fever. He was admitted to hospital near his London home and, a week before his death, was transferred to the liver intensive care unit and was on life support. Jeff Elms, events officer for Boston Rowing Club, which organizes the race, said there was no way of knowing whether [the rower] contracted the infection from the River Witham. He said: "Like running a marathon, you do not do a 31-mile rowing race without many miles of training and this was one of many sources of contact with water that he had. You're incredibly unlucky if you're the individual who contracts it. It's very sad he died, but I hope people will be sensible about it and carry on water activities, which are good for everybody's health." Welfare officer for Boston Rowing Club, Mark Housam, said: "Part of any rower's training is being warned about water safety. If you fall into water you must wash thoroughly and if you think you have ingested any water seek medical advice." Children's coach at Lincoln Canoe Club, Gary Quittenton, 42, said youngsters were always briefed on the dangers of water including Weil's disease. "We always tell them to cover cuts and sores up with waterproof plasters and wash their hands, especially before eating," said Mr Quittenton, of Saxilby. And if they develop flu-like symptoms make sure they tell the doctor they have been canoeing on mucky water. I met [the victim and his rowing partner] when

they were in training and they were both proper role models for the sport." (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmh.maryland.gov/>

Maryland's Resident Influenza Tracking System: <http://dhmh.maryland.gov/flusurvey>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

Sadia Aslam, MPH
Epidemiologist
Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene
300 W. Preston Street, Suite 202
Baltimore, MD 21201
Office: 410-767-2074
Fax: 410-333-5000
Email: SAslam@dhmh.state.md.us

Zachary Faigen, MSPH
Epidemiologist
Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene
300 W. Preston Street, Suite 202
Baltimore, MD 21201
Office: 410-767-6745
Fax: 410-333-5000
Email: ZFaigen@dhmh.state.md.us